I hereby certify that this correspondence is being deposited in the United States Postal Services as First Class Mail in an envelope addressed to:

Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney for Applicant(s)

Date: 03 December 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	09/801,628
Applicant(s)	:	Keeth et al.
Filed	:	8 March 2001
Titled	:	256 MEG DYNAMIC RANDOM ACCESS MEMORY
Art Unit	:	2818
Examiner	:	Michael Thanh Tran
Atty Docket No.	:	DB000575-010
Patent No.	:	6,735,102 B2

RECEIVED
DEC 14 2004
OIPE/JCWS

TRANSMITTAL LETTER

To: Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate
DEC 07 2004
of Correction

Attn: Decision and Certificate of Correction
Branch of the Patent Issue Division

Dear Sir:

Enclosed for filing please find the following:

- Form PTO/SB/44 (9 pages) (in duplicate);
- Request for Certificate of Correction Pursuant to 37 C.F.R. § 1.322;
- PTO/SB/17; and
- Check in the amount of $100 as the requisite fee.

A return postcard is also enclosed. Please date stamp and mail the postcard to acknowledge receipt of this correspondence.

Respectfully submitted,

Edward L. Pencoske
Reg. No. 29,688
Thorp Reed & Armstrong, LLP
One Oxford Centre, 14th Floor
Pittsburgh, PA 15219-1425
(412) 394-7789

Dated: 03 December 2004

Attorneys for Applicant(s)

DEC 29 2004

I hereby certify that this correspondence is being deposited in the United States Postal Services as First Class Mail in an envelope addressed to:

Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney for Applicant(s)

Date: 03 December 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	09/801,628
Applicant(s)	:	Keeth et al.
Filed	:	8 March 2001
Titled	:	256 MEG DYNAMIC RANDOM ACCESS MEMORY
Art Unit	:	2818
Examiner	:	Michael Thanh Tran
Atty Docket No.	:	DB000575-010
Patent No.	:	6,735,102 B2

TRANSMITTAL LETTER

To: Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Attn: Decision and Certificate of Correction
Branch of the Patent Issue Division

Dear Sir:

Enclosed for filing please find the following:

- Form PTO/SB/44 (9 pages) (in duplicate);
- Request for Certificate of Correction Pursuant to 37 C.F.R. § 1.322;
- PTO/SB/17; and
- Check in the amount of $100 as the requisite fee.

A return postcard is also enclosed. Please date stamp and mail the postcard to acknowledge receipt of this correspondence.

Respectfully submitted,

Edward L. Pencoske
Reg. No. 29,688
Thorp Reed & Armstrong, LLP
One Oxford Centre, 14th Floor
Pittsburgh, PA 15219-1425
(412) 394-7789

Dated: 03 December 2004

Attorneys for Applicant(s)

DEC 29 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2:
line 7, delete "S" and insert therefore - - 5 - -.
line 29, after "the" delete - - is - -.

Column 3, line 3, delete "S".

Column 6, line 25, delete "4 Mbx4" and insert therefore - - 4 Mb x4 - -.

Column 8, line 6, delete "modest," and insert therefore - - modes, - -.

Column 9, line 10, delete "vccp" and insert therefore - - Vccp - -.

Column 10, line 31, delete "dependant" and insert therefore - - dependent - - .

Column 12, line 14, delete "PMOS" and insert therefore - - pMOS - -.

Column 17, line 30, delete "show" and insert therefore - - shown - - .

Column 18:
line 7, delete "DVC2Up/Down" and insert therefore - - DVC2 Up/Down - -.
line 61, delete "CMAT" and insert therefore - - CA01 - -.

Column 23:
line 28, delete "mapvccp" and insert therefore - - mapVccp - - .
line 35, delete "the" first occurrence.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 1 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 29 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 24:
line 19, delete "So" and insert therefore - - 50 - -.
line 48, after "60" delete - - ' - -.

Column 25:
line 15, delete second occurrence "72" and insert therefore - - 72', - -.
line 15, delete " 74'Once" and insert therefore - - 74'. Once - -.
line 19, delete "8—16" and insert therefore - - 8x16 - -.
line 22, delete "data lines" and insert therefore - - datalines - - .
line 35, delete "FIG. S" and insert therefore - - FIG. 5 - -.

Column 26, line 2, delete "data lines" and insert therefore - - datalines - - .

Column 27:
line 18, delete "a".
line 27, delete "has-a" and insert therefore - - has a - -.
line 37, delete "NMOS" and insert therefore - - nMOS - -.

Column 31, line 48, delete "DC 21" and insert therefore - - DC21 - -.

Column 33, line 59, after "33C" delete - - 5 - -.

Column 34:
line 3, delete "vcc" and insert therefore - - Vcc - -.
line 23, delete "mapvccp" and insert therefore - - mapVccp - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 2 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 34:
line 32, delete "mapvccp" and insert therefore - - mapVccp - -.

Column 37:
line 3, delete "PMOS" and insert therefore - - pMOS - -.
line 22, delete "PMOS" and insert therefore - - pMOS - -.
line 46, delete "advertized" and insert therefore - - advertised - - .
line 51, delete "dependance" and insert therefore - - dependence - - .

Column 40:
line 11, delete "vcc" and insert therefore - - Vcc - -.
line 13, delete "PMOS" and insert therefore - - pMOS - -.
line 34, delete "PMOS" and insert therefore - - pMOS - -.
line 38, delete "that" second occurrence and insert therefore - - the - - .

Column 41, line 50, delete "additional" and insert therefore - - addition - - .

Column 42:
line 1, delete "PMOS" and insert therefore - - pMOS - -.
line 6, delete "NMOS" and insert therefore - - nMOS - -.

Column 43:
line 28, after "The" delete - - is - -.
line 29, delete "REG 2 VBBON" and insert therefore - - REG2VBBON - -.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,735,102 B2

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

No. of additional copies
⇨ 3 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 43:
line, 42, delete "vbb" and insert therefore - - Vbb - -.
line 44, delete "vbb" and insert therefore - - Vbb - -.
line 45, delete "vbb" and insert therefore - - Vbb - -.
line 49, delete "vbb" and insert therefore - - Vbb - -.

Column 44, line 56, delete "vccp" and insert therefore - - Vccp - -.

Column 45:
line 28, after "variable" delete - - a - -.
line 32, delete "airing." and insert therefore - - a ring. - -.
line 42, delete "PMOS" and insert therefore - - pMOS - -.
line 42, delete "NMOS" and insert therefore - - nMOS - -.

Column 46:
line 20, after "current" delete - - , - -.
line 64, delete "NMOS" and insert therefore - - nMOS - -.

Column 50:
line 5, delete "from" and insert therefore - - form - - .
line 30, delete "RASD" and insert therefore - - RAS D - - .

Column 51, line 6, delete "circuit-which" and insert therefore - - circuit which - -.

Column 52:
line 42, delete "p col" and insert thereafter - - pcol - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies
⇨ 4 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 52:
line 62, delete "4 k8 k" and insert thereafter - - 4k8k - -.
line 63, delete "8 k 16 k" and insert thereafter - - 8k16k - -.
line 66, delete "49 C" and insert thereafter - - 49C - -.

Column 54, line 16, delete "vccp" and insert thereafter - - Vccp - -.

Column 57, line 55, delete "900" and insert thereafter - - 90° - -.

Column 59, line 25, after "decoders" delete - - , - -.

Column 60:
line 22, after "conjunction" delete - - - - -.
line 61, delete "DVC2PRIBE" and insert thereafter - - DVC2PROBE - -.

Column 61:
line 33, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.
lines 33, 34, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.
line 34, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.
line 43, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.
line 43, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.
line 45, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 5 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 61 (cont'd.)
lines 64, 65 delete "32 MEGENa" and insert thereafter - - 32MEGENa - -.
line 65, delete "32 MEGENb" and insert thereafter - - 32MEGENb - -.

Column 62:
line 1, delete "32 MEGENa" and insert thereafter - - 32MEGENa - -.
line 1, delete "32 MEGENb" and insert thereafter - - 32MEGENb - -.

Column 63:
line 20, delete "CAO1" and insert thereafter - - CA01 - -.

Column 64, line 33, delete "G 252" and insert thereafter - - G252 - -.

Column 66, line 23, after "state" delete - - - - -.

Column 67:
line 38, delete "NMOS" and insert therefore - - nMOS - -.
line 54, delete "NMOS" and insert therefore - - nMOS - -.
line 55, after "to" delete - - - - -.

Column 68, line 38, delete "N,AND" and insert therefore - - NAND - -.

Column 70:
line 28, delete "the", first occurrence.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 6 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 70: (cont'd.)
line 40, delete "is,low," and insert therefore - - is low, - -.
line 65, after "low" delete - - - - -.

Column 72, line 11, delete "descrition" and insert therefore - - description - - .

Column 75, line 53, delete "his" and insert therefore - - This - -.

Column 82, line 39, delete "various" and insert therefore - - Various - -.

In the claims:
Column 83:
line 10, delete "fanning" and insert therefore - - forming - -.
line 19, delete "army" and insert therefore - - array - -.
line 33, delete "pound" and insert therefore - - ground - -.
line 35, delete "pound" and insert therefore - - ground - -.
line 39, delete "round" and insert therefore - - ground - -.

Column 84:
line 2, delete "amid" and insert therefore - - said - -.
line 7, delete "army" and insert therefore - - array - -.
line 41, delete "amid" and insert therefore - - said - -.
line 54, delete "multiplexer" and insert therefore - - multiplexers - -.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,735,102 B2

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

No. of additional copies

⇨ 7 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 84: (cont'd.)
line 56, delete "block" and insert therefore "blocks".
line 66, delete "fur" and insert therefore - - for - -.

Column 85:
line 3, after "wherein" delete - - , - -.
line 8, delete "way" and insert therefore - - array - -.
line 16, delete "mono" and insert therefore - - in one - -.
line 26, delete "block," and insert therefore - - blocks, - -.
line 41, delete "may" and insert therefore - - array - -.

Column 86:
line 2, delete "currying" and insert therefore - - carrying - -.
line 19, delete "pound" and insert therefore - - ground - -.
line 27, delete "aback" and insert therefore - - a back - -.
line 47, delete "so" and insert therefore - - to - -.
line 59, delete "end" and insert therefore - - and - -.
line 60, delete "tanning" and insert therefore - - running - -.
line 65, delete "end" and insert therefore - - and - -.

Column 87:
line 4, delete "for" and insert therefore - - form - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 8 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 87: (cont'd.)
line 4, delete "may" and insert therefore - - array - -.
line 14, after "blocks" insert - - , - -.
line 16, delete "may" and insert therefore - - array - -.
line 19, delete "pound" and insert therefore - - ground - -.
line 47, delete "multiplexer." and insert therefore - - multiplexers. - -.

Column 88:
line 4, delete "firming" and insert therefore - - running - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 9 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 29 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2:
line 7, delete "S" and insert therefore - - 5 - -.
line 29, after "the" delete - - is - -.

Column 3, line 3, delete "S".

Column 6, line 25, delete "4 Mbx4" and insert therefore - - 4 Mb x4 - -.

Column 8, line 6, delete "modest," and insert therefore - - modes, - -.

Column 9, line 10, delete "vccp" and insert therefore - - Vccp - -.

Column 10, line 31, delete "dependant" and insert therefore - - dependent - - .

Column 12, line 14, delete "PMOS" and insert therefore - - pMOS - -.

Column 17, line 30, delete "show" and insert therefore - - shown - - .

Column 18:
line 7, delete "DVC2Up/Down" and insert therefore - - DVC2 Up/Down - -.
line 61, delete "CMAT" and insert therefore - - CA01 - -.

Column 23:
line 28, delete "mapvccp" and insert therefore - - mapVccp - - .
line 35, delete "the" first occurrence.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 1 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 24:
line 19, delete "So" and insert therefore - - 50 - -.
line 48, after "60" delete - - ' - -.

Column 25:
line 15, delete second occurrence "72" and insert therefore - - 72', - -.
line 15, delete " 74'Once" and insert therefore - - 74'. Once - -.
line 19, delete "8—16" and insert therefore - - 8x16 - -.
line 22, delete "data lines" and insert therefore - - datalines - - .
line 35, delete "FIG. S" and insert therefore - - FIG. 5 - -.

Column 26, line 2, delete "data lines" and insert therefore - - datalines - - .

Column 27:
line 18, delete "a".
line 27, delete "has-a" and insert therefore - - has a - -.
line 37, delete "NMOS" and insert therefore - - nMOS - -.

Column 31, line 48, delete "DC 21" and insert therefore - - DC21 - -.

Column 33, line 59, after "33C" delete - - 5 - -.

Column 34:
line 3, delete "vcc" and insert therefore - - Vcc - -.
line 23, delete "mapvccp" and insert therefore - - mapVccp - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies
⇨ 2 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 34:
line 32, delete "mapvccp" and insert therefore - - mapVccp - -.

Column 37:
line 3, delete "PMOS" and insert therefore - - pMOS - -.
line 22, delete "PMOS" and insert therefore - - pMOS - -.
line 46, delete "advertized" and insert therefore - - advertised - - .
line 51, delete "dependance" and insert therefore - - dependence - - .

Column 40:
line 11, delete "vcc" and insert therefore - - Vcc - -.
line 13, delete "PMOS" and insert therefore - - pMOS - -.
line 34, delete "PMOS" and insert therefore - - pMOS - -.
line 38, delete "that" second occurrence and insert therefore - - the - - .

Column 41, line 50, delete "additional" and insert therefore - - addition - - .

Column 42:
line 1, delete "PMOS" and insert therefore - - pMOS - -.
line 6, delete "NMOS" and insert therefore - - nMOS - -.

Column 43:
line 28, after "The" delete - - is - -.
line 29, delete "REG 2 VBBON" and insert therefore - - REG2VBBON - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies
⇨ 3 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 43:
line, 42, delete "vbb" and insert therefore - - Vbb - -.
line 44, delete "vbb" and insert therefore - - Vbb - -.
line 45, delete "vbb" and insert therefore - - Vbb - -.
line 49, delete "vbb" and insert therefore - - Vbb - -.

Column 44, line 56, delete "vccp" and insert therefore - - Vccp - -.

Column 45:
line 28, after "variable" delete - - a - -.
line 32, delete "airing." and insert therefore - - a ring. - -.
line 42, delete "PMOS" and insert therefore - - pMOS - -.
line 42, delete "NMOS" and insert therefore - - nMOS - -.

Column 46:
line 20, after "current" delete - - , - -.
line 64, delete "NMOS" and insert therefore - - nMOS - -.

Column 50:
line 5, delete "from" and insert therefore - - form - - .
line 30, delete "RASD" and insert therefore - - RAS D - - .

Column 51, line 6, delete "circuit-which" and insert therefore - - circuit which - -.

Column 52:
line 42, delete "p col" and insert thereafter - - pcol - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies
⇨ 4 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 52:
line 62, delete "4 k8 k" and insert thereafter - - 4k8k - -.
line 63, delete "8 k 16 k" and insert thereafter - - 8k16k - -.
line 66, delete "49 C" and insert thereafter - - 49C - -.

Column 54, line 16, delete "vccp" and insert thereafter - - Vccp - -.

Column 57, line 55, delete "900" and insert thereafter - - 90° - -.

Column 59, line 25, after "decoders" delete - - , - -.

Column 60:
line 22, after "conjunction" delete - - - - -.
line 61, delete "DVC2PRIBE" and insert thereafter - - DVC2PROBE - -.

Column 61:
line 33, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.
lines 33, 34, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.
line 34, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.
line 43, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.
line 43, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.
line 45, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 5 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 61 (cont'd.)
lines 64, 65 delete "32 MEGENa" and insert thereafter - - 32MEGENa - -.
line 65, delete "32 MEGENb" and insert thereafter - - 32MEGENb - -.

Column 62:
line 1, delete "32 MEGENa" and insert thereafter - - 32MEGENa - -.
line 1, delete "32 MEGENb" and insert thereafter - - 32MEGENb - -.

Column 63:
line 20, delete "CAO1" and insert thereafter - - CA01 - -.

Column 64, line 33, delete "G 252" and insert thereafter - - G252 - -.

Column 66, line 23, after "state" delete - - - - -.

Column 67:
line 38, delete "NMOS" and insert therefore - - nMOS - -.
line 54, delete "NMOS" and insert therefore - - nMOS - -.
line 55, after "to" delete - - - - -.

Column 68, line 38, delete "N,AND" and insert therefore - - NAND - -.

Column 70:
line 28, delete "the", first occurrence.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 6 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 70: (cont'd.)
line 40, delete "is,low," and insert therefore - - is low, - -.
line 65, after "low" delete - - - - -.

Column 72, line 11, delete "descrition" and insert therefore - - description - - .

Column 75, line 53, delete "his" and insert therefore - - This - -.

Column 82, line 39, delete "various" and insert therefore - - Various - -.

In the claims:
Column 83:
line 10, delete "fanning" and insert therefore - - forming - -.
line 19, delete "army" and insert therefore - - array - -.
line 33, delete "pound" and insert therefore - - ground - -.
line 35, delete "pound" and insert therefore - - ground - -.
line 39, delete "round" and insert therefore - - ground - -.

Column 84:
line 2, delete "amid" and insert therefore - - said - -.
line 7, delete "army" and insert therefore - - array - -.
line 41, delete "amid" and insert therefore - - said - -.
line 54, delete "multiplexer" and insert therefore - - multiplexers - -.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,735,102 B2

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

No. of additional copies

⇨ 7 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 2 9 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 84: (cont'd.)
line 56, delete "block" and insert therefore "blocks".
line 66, delete "fur" and insert therefore - - for - -.

Column 85:
line 3, after "wherein" delete - - , - -.
line 8, delete "way" and insert therefore - - array - -.
line 16, delete "mono" and insert therefore - - in one - -.
line 26, delete "block," and insert therefore - - blocks, - -.
line 41, delete "may" and insert therefore - - array - -.

Column 86:
line 2, delete "currying" and insert therefore - - carrying - -.
line 19, delete "pound" and insert therefore - - ground - -.
line 27, delete "aback" and insert therefore - - a back - -.
line 47, delete "so" and insert therefore - - to - -.
line 59, delete "end" and insert therefore - - and - -.
line 60, delete "tanning" and insert therefore - - running - -.
line 65, delete "end" and insert therefore - - and - -.

Column 87:
line 4, delete "for" and insert therefore - - form - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 8 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 29 2004

PTO/SB/44 (04-04)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,735,102 B2

DATED : May 11, 2004

INVENTOR(S) : Keeth et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 87: (cont'd.)
line 4, delete "may" and insert therefore - - array - -.
line 14, after "blocks" insert - - , - -.
line 16, delete "may" and insert therefore - - array - -.
line 19, delete "pound" and insert therefore - - ground - -.
line 47, delete "multiplexer." and insert therefore - - multiplexers. - -.

Column 88:
line 4, delete "firming" and insert therefore - - running - -.

MAILING ADDRESS OF SENDER:

Edward L. Pencoske, Esq., Thorp Reed & Armstrong, LLP,
One Oxford Centre, 14th Flr., 301 Grant St., Pittsburgh, PA 15219-1425

PATENT NO. 6,735,102 B2

No. of additional copies

⇨ 9 of 9

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 29 2004

I hereby certify that this correspondence is being deposited in the United States Postal Services as First Class Mail in an envelope addressed to:

Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney for Applicants

Dated: 03 December 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:		09/801,628
Applicants:	:	Keeth et al.
Filed:	:	8 March 2001
Titled:	:	256 MEG DYNAMIC RANDOM ACCESS MEMORY
Art Unit	:	2818
Examiner	:	Michael Thanh Tran
Atty Docket No.:		DB000575-010
Patent No.:		6,735,102 B2

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT

To: Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Attn: Decision and Certificate of Correction
Branch of the Patent Issue Division

Dear Sir:

Attached, in duplicate, is Form PTO/SB/44, with at least one copy being suitable for printing.

Please correct the errors as follows:

In the text:

Column 2:

line 7, delete "S" and insert therefore - - 5 - -.

line 29, after "the" delete - - is - -.

Column 3, line 3, delete "S".

Column 6, line 25, delete "4 Mbx4" and insert therefore - - 4 Mb x4 - -.

Column 8, line 6, delete "modest," and insert therefore - - modes, - -.

Column 9, line 10, delete "vccp" and insert therefore - - Vccp - -.

Column 10, line 31, delete "dependant" and insert therefore - - dependent - - .

Column 12, line 14, delete "PMOS" and insert therefore - - pMOS - -.

Column 17, line 30, delete "show" and insert therefore - - shown - - .

Column 18:

line 7, delete "DVC2Up/Down" and insert therefore - - DVC2 Up/Down - -.

line 61, delete "CMAT" and insert therefore - - CA01 - -.

DEC 29 2004

12/14/2004 NNGUYEN1 00000072 6735102 100.00 OP

01 FC:1811

Column 23:

line 28, delete "mapvccp" and insert therefore - - mapVccp - -.

line 35, delete "the" first occurrence.

Column 24:

line 19, delete "So" and insert therefore - - 50 - -.

line 48, after "60" delete - - ' - -.

Column 25:

line 15, delete second occurrence "72" and insert therefore - - 72', - -.

line 15, delete " 74'Once" and insert therefore - - 74'. Once - -.

line 19, delete "8—16" and insert therefore - - 8x16 - -.

line 22, delete "data lines" and insert therefore - - datalines - - .

line 35, delete "FIG. S" and insert therefore - - FIG. 5 - -.

Column 26, line 2, delete "data lines" and insert therefore - - datalines - - .

Column 27:

line 18, delete "a".

line 27, delete "has-a" and insert therefore - - has a - -.

line 37, delete "NMOS" and insert therefore - - nMOS - -.

Column 31, line 48, delete "DC 21" and insert therefore - - DC21 - -.

Column 33, line 59, after "33C" delete - - 5 - -.

Column 34:

line 3, delete "vcc" and insert therefore - - Vcc - -.

line 23, delete "mapvccp" and insert therefore - - mapVccp - -.

line 32, delete "mapvccp" and insert therefore - - mapVccp - -.

Column 37:

line 3, delete "PMOS" and insert therefore - - pMOS - -.

line 22, delete "PMOS" and insert therefore - - pMOS - -.

line 46, delete "advertized" and insert therefore - - advertised - - .

line 51, delete "dependance" and insert therefore - - dependence - - .

Column 40:

line 11, delete "vcc" and insert therefore - - Vcc - -.

line 13, delete "PMOS" and insert therefore - - pMOS - -.

line 34, delete "PMOS" and insert therefore - - pMOS - -.

line 38, delete "that" second occurrence and insert therefore - - the - - .

Column 41, line 50, delete "additional" and insert therefore - - addition - - .

Column 42:

line 1, delete "PMOS" and insert therefore - - pMOS - -.

DEC 2 9 2004

line 6, delete "NMOS" and insert therefore - - nMOS - -.

Column 43:

line 28, after "The" delete - - is - -.

line 29, delete "REG 2 VBBON" and insert therefore - - REG2VBBON - -.

line, 42, delete "vbb" and insert therefore - - Vbb - -.

line 44, delete "vbb" and insert therefore - - Vbb - -.

line 45, delete "vbb" and insert therefore - - Vbb - -.

line 49, delete "vbb" and insert therefore - - Vbb - -.

Column 44, line 56, delete "vccp" and insert therefore - - Vccp - -.

Column 45:

line 28, after "variable" delete - - a - -.

line 32, delete "airing." and insert therefore - - a ring. - -.

line 42, delete "PMOS" and insert therefore - - pMOS - -.

line 42, delete "NMOS" and insert therefore - - nMOS - -.

Column 46:

line 20, after "current" delete - - , - -.

line 64, delete "NMOS" and insert therefore - - nMOS - -.

Column 50:

line 5, delete "from" and insert therefore - - form - - .

line 30, delete "RASD" and insert therefore - - RAS D - - .

Column 51, line 6, delete "circuit-which" and insert therefore - - circuit which - -.

Column 52:

line 42, delete "p col" and insert thereafter - - pcol - -.

line 62, delete "4 k8 k" and insert thereafter - - 4k8k - -.

line 63, delete "8 k 16 k" and insert thereafter - - 8k16k - -.

line 66, delete "49 C" and insert thereafter - - 49C - -.

Column 54, line 16, delete "vccp" and insert thereafter - - Vccp - -.

Column 57, line 55, delete "900" and insert thereafter - - 90° - -.

Column 59, line 25, after "decoders" delete - - , - -.

Column 60:

line 22, after "conjunction" delete - - . - - -.

line 61, delete "DVC2PRIBE" and insert thereafter - - DVC2PROBE - -.

Column 61:

line 33, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.

lines 33, 34, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.

line 34, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.

DEC 2 9 2004

line 43, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.

line 43, delete "32 MEGEN" and insert thereafter - - 32MEGEN - -.

line 45, delete "32 MEGEN*." and insert thereafter - - 32MEGEN*. - -.

lines 64, 65 delete "32 MEGENa" and insert thereafter - - 32MEGENa - -.

line 65, delete "32 MEGENb" and insert thereafter - - 32MEGENb - -.

Column 62:

line 1, delete "32 MEGENa" and insert thereafter - - 32MEGENa - -.

line 1, delete "32 MEGENb" and insert thereafter - - 32MEGENb - -.

Column 63:

line 20, delete "CAO1" and insert thereafter - - CA01 - -.

Column 64, line 33, delete "G 252" and insert thereafter - - G252 - -.

Column 66, line 23, after "state" delete - - - - -.

Column 67:

line 38, delete "NMOS" and insert therefore - - nMOS - -.

line 54, delete "NMOS" and insert therefore - - nMOS - -.

line 55, after "to" delete - - - - -.

Column 68, line 38, delete "N,AND" and insert therefore - - NAND - -.

Column 70:

line 28, delete "the", first occurrence.

line 40, delete "is,low," and insert therefore - - is low, - -.

line 65, after "low" delete - - - - -.

Column 72, line 11, delete "descrition" and insert therefore - - description - - .

Column 75, line 53, delete "his" and insert therefore - - This - -.

Column 82, line 39, delete "various" and insert therefore - - Various - -.

In the claims:

Column 83:

line 10, delete "fanning" and insert therefore - - forming - -.

line 19, delete "army" and insert therefore - - array - -.

line 33, delete "pound" and insert therefore - - ground - -.

line 35, delete "pound" and insert therefore - - ground - -.

line 39, delete "round" and insert therefore - - ground - -.

Column 84:

line 2, delete "amid" and insert therefore - - said - -.

line 7, delete "army" and insert therefore - - array - -.

line 41, delete "amid" and insert therefore - - said - -.

line 54, delete "multiplexer" and insert therefore - - multiplexers - -.

DEC 2 9 2004

line 56, delete "block" and insert therefore "blocks".

line 66, delete "fur" and insert therefore - - for - -.

Column 85:

line 3, after "wherein" delete - - , - -.

line 8, delete "way" and insert therefore - - array - -.

line 16, delete "mono" and insert therefore - - in one - -.

line 26, delete "block," and insert therefore - - blocks, - -.

line 41, delete "may" and insert therefore - - array - -.

Column 86:

line 2, delete "currying" and insert therefore - - carrying - -.

line 19, delete "pound" and insert therefore - - ground - -.

line 27, delete "aback" and insert therefore - - a back - -.

line 47, delete "so" and insert therefore - - to - -.

line 59, delete "end" and insert therefore - - and - -.

line 60, delete "tanning" and insert therefore - - running - -.

line 65, delete "end" and insert therefore - - and - -.

Column 87:

line 4, delete "for" and insert therefore - - form - -.

line 4, delete "may" and insert therefore - - array - -.

line 14, after "blocks" insert - - , - -.

line 16, delete "may" and insert therefore - - array - -.

line 19, delete "pound" and insert therefore - - ground - -.

line 47, delete "multiplexer." and insert therefore - - multiplexers. - -.

Column 88:

line 4, delete "firming" and insert therefore - - running - -.

Please send the Certificate to:

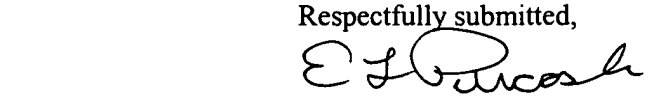
Edward L. Pencoske, Esquire
Thorp Reed & Armstrong, LLP
One Oxford Centre
300 Grant Street, 14th Floor
Pittsburgh, PA 15219

A check in the amount of $100 is enclosed herewith. The Commissioner is hereby authorized to charge any underpayments or credit any overpayments to our Deposit Account No. 20-0888. A duplicate copy of this request is enclosed.

DEC 29 2004

A return postcard is also enclosed. Please date stamp and mail the postcard to acknowledge receipt of this correspondence.

Respectfully submitted,



Edward L. Pencoske
Reg. No. 29,688
Thorp Reed & Armstrong, LLP
One Oxford Centre, 14th Floor
Pittsburgh, PA 15219-1425
(412) 394-7789

Dated: 03 December 2004

Attorneys for Applicants

DEC 29 2004

PTO/SB/17 (11-04)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Effective on 10/01/2004. Patent fees are subject to annual revision.

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 100

Complete if Known	
Application Number	09/801,628
Filing Date	8 March 2001
First Named Inventor	Keeth et al.
Examiner Name	Michael Thanh Tran
Art Unit	2818
Attorney Docket No.	DB000575-010

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order

☒ Deposit Account ☐ None

Deposit Account Number: 20-0888

Deposit Account Name: Thorp Reed & Armstrong

The Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17

☒ Credit any overpayments

to the above-identified deposit account.

☐ Other (please identify): _____

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING FEE

Fee Description	Fee ($)	Small Entity Fee ($)	Fee Paid($)
Utility Filing Fee	790	395	
Design Filing Fee	350	175	
Plant Filing Fee	550	275	
Reissue Filing Fee	790	395	
Provisional Filing Fee	160	80	

Subtotal (1) $ 0

FEE CALCULATION (continued)

2. EXTRA CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20	18	9
Each independent claim over 3	88	44
Multiple dependent claims	300	150
For Reissues, each claim over 20 and more than in the original patent	18	9
For Reissues, each independent claim more than in the original patent	88	44

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 20 or HP =	_____	x _____	= _____

HP = highest number of total claims paid for, if greater than 20

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 3 or HP =	_____	x _____	= _____

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims	Fee ($)	Fee Paid ($)
	_____	_____

Subtotal (2) $ 0

3. OTHER FEES

Fee Description	Fee ($)	Small Entity Fee ($)	Fee Paid($)
1-month extension of time	110	55	
2-month extension of time	430	215	
3-month extension of time	980	490	
4-month extension of time	1,530	765	
5-month extension of time	2,080	1,040	
Information disclosure stmt. fee	180	180	
37 CFR 1.17(q) processing fee	50	50	
Non-English specification	130	130	
Notice of Appeal	340	170	
Filing a brief in support of appeal	340	170	
Request for oral hearing	300	150	
Other: Certificate of Correction			100

Subtotal (3) $ 100

SUBMITTED BY

Signature	E L Pencoske	Registration No. (Attorney/Agent) 29,688	Telephone 412-394-7789
Name (Print/Type)	Edward L. Pencoske		Date 3 Dec. 2004

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 29 2004

PTO/SB/17 (11-04)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 10/01/2004. Patent fees are subject to annual revision.

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 100

Complete if Known	
Application Number	09/801,628
Filing Date	8 March 2001
First Named Inventor	Keeth et al.
Examiner Name	Michael Thanh Tran
Art Unit	2818
Attorney Docket No.	DB000575-010

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order

☒ Deposit Account ☐ None

Deposit Account Number: 20-0888

Deposit Account Name: Thorp Reed & Armstrong

The Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17

☒ Credit any overpayments

to the above-identified deposit account.

☐ Other (please identify): _____

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING FEE

Fee Description	Fee ($)	Small Entity Fee ($)	Fee Paid($)
Utility Filing Fee	790	395	
Design Filing Fee	350	175	
Plant Filing Fee	550	275	
Reissue Filing Fee	790	395	
Provisional Filing Fee	160	80	

Subtotal (1) $ 0

FEE CALCULATION (continued)

2. EXTRA CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20	18	9
Each independent claim over 3	88	44
Multiple dependent claims	300	150
For Reissues, each claim over 20 and more than in the original patent	18	9
For Reissues, each independent claim more than in the original patent	88	44

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 20 or HP =	_____	x _____	= _____

HP = highest number of total claims paid for, if greater than 20

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 3 or HP =	_____	x _____	= _____

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims	Fee ($)	Fee Paid ($)
	_____	_____

Subtotal (2) $ 0

3. OTHER FEES

Fee Description	Fee ($)	Small Entity Fee ($)	Fee Paid($)
1-month extension of time	110	55	
2-month extension of time	430	215	
3-month extension of time	980	490	
4-month extension of time	1,530	765	
5-month extension of time	2,080	1,040	
Information disclosure stmt. fee	180	180	
37 CFR 1.17(q) processing fee	50	50	
Non-English specification	130	130	
Notice of Appeal	340	170	
Filing a brief in support of appeal	340	170	
Request for oral hearing	300	150	
Other: Certificate of Correction			100

Subtotal (3) $ 100

SUBMITTED BY

Signature	E L Pencoske	Registration No. (Attorney/Agent) 29,688	Telephone 412-394-7789
Name (Print/Type)	Edward L. Pencoske		Date 3 Dec. 2004

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 29 2004